Contesting *powerful knowledge*: The primary geography curriculum as an articulation between academic and children's (ethno-) geographies

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Abstract

The argument has been propounded that academic disciplines and school subjects provide a powerful, authoritative knowledge which is key to enabling children to better understand the world in which they live. Inherent in this perspective is that children's experience, knowledge and understanding is poorly formed and of limited everyday use and value. Yet it is appreciated that children's naïve knowledge can be a pedagogic starting point to initiate them into academic subjects. While appreciating the purpose and roles of academic subjects, this paper challenges these assumptions, arguing that children's ethno-knowledges provide powerful learning bases of equivalent authority to subjects. Using the example of younger children's everyday or ethno-geography, the case is that children bring to school powerful (geographical) knowledge of their own. This can and should be recognised and valued in dialogue with authoritative (geographical) subject knowledge, not as subservient to it. It is argued that this perspective goes beyond that of the child/subject co-construction of knowledge to inter-relate the developmental nature of children's everyday (geographical) learning with (geography) sense-of-subject evolution. This case is set in the context of geography but is applicable to other school subjects, where children's and subjects' powerful knowledges can mutually engage with and enhance each other.

Introduction

The purpose of this article is to explore the notion of *powerful knowledge* within the context of the primary curriculum. The ideas we develop stem from three sources: research into primary student teachers' conceptualisations of geography education and how to teach it (Martin, 2008a, 2008b); the application of research into children's geographies to education (Catling, 2003, 2005; Catling & Willy, 2009); and Michael Young's recent argument for reasserting knowledge in the curriculum (Young, 2008). In the context of the primary geography curriculum, teachers' lack of subject knowledge has been identified as problematic for some time (Bell, 2005; Ofsted, 2008, 2011). This has coincided with an apparent erosion of the importance of subject knowledge in schooling and with an inferred downgrading of the importance of curriculum in relation to experience:

> A school shouldn't start with curriculum content. It should start with designing a learning experience and then check it has met national curriculum requirements. (Mick Waters, quoted in Wilby, *The Guardian*, 2010).

The primacy of experience over knowledge – as if the former can be planned for without consideration of the latter – is causing some concern and is arguably behind Michael Young's call for a re-emphasis on subject knowledge, with a particular focus on what he calls '*powerful knowledge*' (Young, 2008). This concern is reflected in the government's revisions to the national curriculum which it is intended will retain a subject-based curriculum with, as expressed in the recent schools White Paper (DfE, 2010), 'core knowledge' being identified for each phase of education (DfE, 2011). This is not a unique concern within England, as a cross-national evaluation of approaches to curriculum review reveals (Sargent et al., 2010), which notes concerns by governments to clarify the knowledge that should be taught to children, but that this should not be onerous. A key purpose for several countries is the need to make the curriculum more meaningful and relevant and to do this through connecting more appropriately with children's everyday lives. A concomitant interest lies in how to define knowledge and its relationship to subjects and, indeed, to children and their experience and learning.

The time, therefore, seems ripe for some reflection on the roles of knowledge and children's experience in a subject-based curriculum. We argue that while we agree with the need to 'bring knowledge back in' (Young, 2008), we are less convinced by Young's notion of *powerful knowledge* as he presents it and we understand it. Although Young himself has said that his ideas are predominantly aimed at secondary education, we believe that it is relevant and vital to consider its application to primary education for two reasons. Firstly, the curriculum review relates to *all* phases of statutory education in order to achieve the coherence and consistency that was arguably lacking following the revisions under the previous government (QCA, 2007; Rose, 2009). Secondly, as for current and previous versions of the National Curriculum (DES, 1991; DfEE/QCA, 1999), a top-down approach to curriculum design remains likely, with decisions being made for and at secondary level, then filtered 'down' to primary schools. The emphasis on the secondary phase is evident through the greater emphasis on secondary curriculum and assessment in the White Paper and curriculum review (DfE, 2010, 2011) and in ministerial briefings and speeches on raising older secondary age pupils' achievements in comparison to other nations (Vasagar, 2010).

We argue that *powerful knowledge* as conceived by Young is insufficient in the primary context because it valorises academic knowledge above the everyday or ethno-knowledges (Begg, 2006) that pupils bring with them into school. It is our contention that primary pupils' (and primary teachers') everyday or ethno-geographies should also be seen as valid forms of powerful knowledge, and that their incorporation into the curriculum constitutes a kind of 'liberatory education' (Freire, 1972). We offer a revised model, rebalancing Young's perspective, for how academic and ethno-geography can ground a geography curriculum that is based on a dialogic pedagogy (Alexander, 2008). We are using geographical education here to illustrate an argument that we believe applies across the primary curriculum.

Ethno-geography in the primary phase

Ethno-geography as an idea emerged from the findings of a research study that showed how primary novice teachers' conceptualisations of geography predominantly

relied on memories of the geography they were taught in school (Martin, 2008a, 2008b). When thinking about geography in a primary education context, novice teachers did not appear to recognise the value of their everyday experiences as a potential source of geographical knowledge, nor did they express an awareness that their personal geographies connected in any way with school geography. This 'dis-connection' with the subject is problematic for a number of reasons, particularly because those who do not perceive the relevance of the subject will be unlikely to teach it in a way that is relevant to pupils, and because their lack of awareness of their knowledge base affects their ability to recognise the academic potential of pupils' everyday geographies. This is supported by Ofsted's (2008, 2011) analysis that many primary teachers' geographical subject knowledge is weak.

We contend that, because of their dis-connection with the subject, coupled with the very minimal time allocated to humanities subjects in Initial Teacher Training (Catling, 2006), primary teachers have a problem making a distinction between information, knowledge and understanding. Thus, when thinking about the subject for teaching, their attention is focused on knowledge as *information* rather than knowledge as *understanding* and the basis for informed action. Therefore, it seems imperative to develop a paradigm for primary geography that supports teachers (the very large majority of whom are non-specialists) in making a distinction between these different types of knowledge. We propose that this could be e*thno-geography*.

Ethno- (of the people and their culture) *geography*

> … reflects the view that all [teachers and pupils] are geographers because they all live in the world. They all negotiate and interact with a variety of landscapes (human and natural) on a daily basis. Through these daily interactions and decisions they will have built up a wide knowledge base about the world, near and far, through a range of direct and indirect experiences. What they don't perhaps recognise is that this knowledge is useful geographical knowledge and a point from which deeper conceptual understanding can be developed. (Martin, F., 2005, 291)

An important point to note about the meaning of 'ethno' in *ethno-geography* is that it is about examining how people learn and use 'geography' – though they may not relate or apply directly the term 'geography' to this experience and aspect of their lives – in distinct cultures and in everyday situations within cultures. Thus, in a parallel field of ethnomathematics, Gilmer states,

> 'In this context, we may think of culture as acquired knowledge transmitted among groups. … From this concept of culture, race is not a proxy for culture and "ethno" in ethnomathematics is not a proxy for ethnic.' (Gilmer, 2001, 80)

The cultures represented in the arguments made here are, therefore, those of the academic and everyday, each of which lead to different forms and structures of knowledge. The case presented is to reconnect these two cultures and the structures of knowledge they produce, in the context of primary education and younger children's experience.

The view of knowledge inherent in ethno-geography is similar to Vygotsky's theory of knowledge as social activity-based, and which expresses a dialectic and interdependent relationship between everyday and scientific concepts (Young, 2008). However, 'dialectic' implies that there is a tension between academic and everyday knowledges that needs to be resolved through discussion, the aim of which is to reveal or seek 'truth', the validity of which is traditionally based on generalised, abstract concepts, privileging them over their genesis in the everyday. Rather then a dialectic relationship, we propose a dialogic relationship. *Dialogic* is a discussion between two logics each of which will be informed by the histories and cultures that produced them, in this case academic and ethno-geographies. Alexander (2008) states that the vocabulary we commonly share and use carry our personal interpretations, assumptions and values alongside their own evolution of meaning.

> In dialogic interactions, children are exposed to alternative perspectives *and* required to engage with another person's point of view in ways that challenge and deepen their own conceptual understandings. (Alexander, 2008, 27)

The essence of dialogue is not privileging one perspective over another but the interaction between the two. The dialogue between academic and ethno-geographies deepens and enhances the understanding of both.

As equal partners in the dialogue, this is a distributed approach to knowledge construction. As such, ethno-geography is founded on Freirian liberatory education Freire (1972) argued that the dominant discourse in education, and evident in the curriculum, is that of *the powerful* and does nothing to reflect the lived experiences or culture of the learners. Freire developed a democratic pedagogy aimed at avoiding teaching that led to authority dependence. He developed a socially constructed, dialogic pedagogy in which learners and teachers learn from each other and together construct knowledge in ways that are meaningful to both.

> … Teaching and learning become knowing and reknowing. The learners gradually know what they did not yet know and the educators reknow what they knew before. (Freire, 1998, 90)

Powerful knowledge or knowledge of the powerful?

In his argument for 'bringing knowledge back in', Young (2008) begins by discussing Moore and Muller's (1999) critique of voice discourse theorists. Young shows how Moore and Muller, while providing a useful critique of the so-called 'experience as the foundation of all knowledge' (2008:6), have brought sociology of education to a cul-de-sac because they dismiss the relevance of the everyday knowledge pupils bring with them to the classroom. Young, based on his reading of Vygotsky, reinterprets the problem of voice discourse, and proposes an alternative way forward in which acknowledgement of voice does not, *de facto*, result in a disavowal of 'scientific' or 'expert' knowledge. The arguments put forward by Young are complex and there is not space here to consider them in depth. We have chosen, therefore, to focus on that aspect of his argument that examines the relationship between academic/scientific knowledge and everyday/ethno-knowledge as represented in Figure 1.

Figure 1 represents our interpretation of Young's work and what he says about knowledge, objectivity, and pedagogy. Firstly, Young (2008) is careful to distinguish between knowledge of the powerful (high status knowledge of the ruling classes) and *powerful knowledge*, which refers to the purpose of knowledge in the sense that it can move young people, intellectually, beyond their local and particular circumstances. Young differentiates between the forms of knowledge shown as academic and everyday, arguing that it is only academic knowledge that can claim objectivity because, although it has emerged from experience, it has been reformulated and developed into an abstract body that goes beyond the social circumstances of its generation. *Academic knowledge*, according to Young, has structure and coherence, is rational, and organises thought systematically through concepts. *Everyday knowledge*, on the other hand, is close to experience, personal, untutored, tacit, unformed and not systematic, and thus can have no claims to objectivity. Academic knowledge is therefore portrayed as authoritative and everyday knowledge as naïve.

The Authoritative		mediating between		**The Naïve**
Academic perspectives	->	The Curriculum as replacing the naïve with the authoritative	<-	Everyday perspectives
[*The discipline of geography*]				[*The younger child with geographical experience*]
Powerful Knowledge (the *academic subject*)		Pedagogy draws on the *everyday* to reconstruct it as the *academic subject*		Ethno-knowledge (the *everyday*)
It has: structure coherence rationale concepts and is systematic				It is perceived as: untutored tacit implicit unformed unsystematic

Figure 1: The relationship between authoritative/powerful and everyday (geographical) knowledge (based on Young, 2008 and 2010).

Within the context of the school curriculum, Young argues that disciplinary or specialist knowledge is fundamentally more powerful because it is reliable and potentially testable knowledge that takes anyone *beyond their experience.* This accords with Young's view that the purpose of schooling is to give all students access to the knowledge that most of them will not have the opportunity to acquire at home or socially, and enables social mobility. In other words, Young's argument is one of

social justice. However, unlike Moore and Muller (1999), he does not go on to dismiss completely voice discourse. Instead he proposes a middle way that recognises 'the inescapable role of experience in the production of new knowledge' (Young, 2008, 2011) and that sees this as a valid starting point from which more academic, abstract knowledge can be developed. This is achieved through a Vygotskian social constructivist pedagogy that connects everyday, naïve knowledge to the more abstract scientific concepts that are inherent in subjects. In Young's view, consideration of knowledge and the curriculum cannot be done without consideration of pedagogy since how knowledge is acquired (everyday, tacit) relates directly to how it can then become organised (codified, abstract) within the curriculum.

> It follows that just as the sociology of knowledge is inseparable from the sociology of learning, so the study of the curriculum is inseparable from the study of learning and pedagogy. (Young, 2008, 13)

Everyday knowledge is, therefore, of use *pedagogically* as a starting point and valuable to elicit in the classroom merely in order to rectify misconceptions and to restructure in the academic mould. Young is not using the argument that to focus on the local knowledge that students possess denies working-class children 'access to the knowledge required for social mobility' (Morgan & Williamson, 2009: 47). He believes that 'such everyday knowledge should be the basis for teaching and learning' (ibid) but appears to stop short of considering that this knowledge is powerful in its own right. To us, this constitutes a privileging of academic knowledge over everyday knowledge that is not helpful in the primary education context. Our understanding of ethno-geographies as powerful knowledge is based on Begg's (2006) and D'Ambrosio's (1985) call for the recognition of different dynamic forms of knowledge as a basis for the curriculum. Ethno-knowledges, as ethno-geographies and, indeed, an ethno-curriculum, are active, reflective upon experience, constructive and evolving, just as subjects and disciplines are seen to be. This provides the basis for a dialogic interplay between subjects and children's everyday knowledges.

An argument for the power of everyday knowledge

We intend to counteract the position put forward by Young, initially, by drawing on the work of Freire, and then by applying ideas from postcolonial theory. We will draw on evidence from research in the field of children's geographies to support our ideas in the context of primary geography.

Firstly, Young raises important points about the nature of knowledge and claims to 'truth' and objectivity. The assumption is that everyday knowledge cannot be objective because it is too close to experience, does not have a history behind it, and is unformed or lacks any rational structure. Freire counters this by observing that

> In the first moment, that of the experience of and in daily living, my conscious self is exposing itself to facts, deeds without, nevertheless, asking itself about them, without looking for their "reason for being"… knowing that results from these involvements is that made from pure experience. In the second moment, in which our minds work epistemologically, the methodological rigour with which we come close to the object, having "distanced ourselves" from it, that

> is, having objectified it, offers us another kind of knowing, a knowing whose exactitude gives to the investigator or the thinking subject a margin of security that does not exist in the first kind of knowing, that of common sense. (Freire, 1998, 93)

We infer from this (and the use of the word 'moment') that it is in the very nature of being human to know at these two levels: the first level of 'being' and the second, almost instantaneous, level of reflection. Over time we will have a multitude of first and second moments and from this build knowledge that is structured and helps us to make sense of the world, albeit differently to the structure of the discipline. The culture of childhood thus produces knowledge based on social and environmental interactions, everyday geographies of the spaces and places negotiated either directly or indirectly. Because children's geographies are borne of their culture(s) they are necessarily different to academic geographies, but this does not mean that they do not have structure or that they are not formalised in ways suited to their context (Matthews, 1992; Freeman & Tranter, 2011). We contest, therefore, Young's assertion that everyday geographies are not objective and cannot make claims to truth on the basis that he is using academic perceptions of knowledge as the basis for making this judgement, whereas we would argue that the only valid basis for judging the claims for truth and objectivity are children's own cultural and geographical contexts.

Secondly, the use of academic perceptions of knowledge as the standard by which to view the everyday, or ethno-knowledges, places the two in a binary discourse in which one holds the power and the other is "oppressed".

> We have a strong tendency to affirm that what is different from us is inferior. We start from the belief that our way of being is not only good but better than that of others who are different from us. … The dominant class, then, because it has the power to distinguish itself from the dominated class, first, rejects the differences between them but, second, does not pretend to be equal to those who are different; third, it does not intend that those who are different shall be equal. (Freire, 1998, 71).

We would argue that those who privilege academic knowledge and perceive it as being 'superior' to the 'inferior' everyday knowledge are, in effect, 'Othering' and diminishing the everyday, and children along with it, in a way that is similar to Western 'Othering' of the East or South (Said, 1985). This seems an apposite comparison to make because in colonial times the 'Other' was often portrayed by the West as child-like, without rules or governing structures, and thus naïve and in need of the paternalistic hand of the West to develop. In this respect powerful knowledge is no different to the knowledge of the powerful that Young aims to distance himself from, a point supported by Begg in his observation that

> formal education and subjects have not changed markedly over the last fifty years, … colonialism is alive and well, … and the ruling/upper classes are retaining power and privilege. (Begg, 2006: 2)

Power relations in schools and classrooms have been the subject of much discussion, not least the power relations between teachers and pupils. But the power relations

between the different knowledges represented by the academy and the everyday and how these might influence the curriculum have only been a small part of this debate. To be clear, this is not a discussion about who decides what gets taught in the classroom; it is a discussion about which knowledges derived from which socio-cultural contexts have a right to be represented in the classroom. In our view, academic and everyday knowledges are powerful for different reasons and both need to be included in the curriculum. By arguing for the power of everyday knowledge we are not arguing against academic knowledge – we see both as being important aspects of any curriculum. This is distinct from the voice discourse argument, which seeks to *replace* the power of the academic voice with that of pupil voice. Liberatory education does not believe in replacing one discourse with another; it seeks to give voice to the suppressed and then to create a dialogue with the aim of co-constructing new knowledge. One way to illustrate the power of ethno-knowledges is through the research into children's geographies.

Children's Geographies

Children's geographies recognises that children's experience, views and understanding of the local and wider world are not the same as those of adults' but are no less valid to recognise, investigate, appreciate and value (Horton et al., 2008; van Blerk & Kesby, 2009), not only in the UK but globally (Aitken et al., 2008). Research into children's geographies shows that our younger people develop sophisticated understandings of their worlds and that these understanding are structured and the basis for acting with agency in the world (Aitken, 2001; Freeman & Tranter, 2011; Foley & Leverett, 2011).

This field of study investigates and provides a voice for children's perspectives on their use of space, places and the environment that identifies and clarifies their personal everyday or ethno-geographies. It draws out: how children feel they are perceived in the environment by adults; how experience in places engages them in practices of identity; the ways in which they utilise environments differently alongside adults, layering places with diverse meanings; as well as how they develop environmental and wayfinding skills, understanding and knowledge. While past research has been interested to describe children's environmental and place experience, the focus of *children's geographies* has become increasingly engaged in understanding children's sense of their own geographies. Through such studies researchers have begun to appreciate that children develop not only their experience but construct their knowledge and understanding through that experience, including the affordances and constraints provided by places, their growing sense of values in relation to the environment and their encounters with the wider world through a variety of media.

Evidence suggests that while children constantly encounter a wide range of 'particulars' and items of 'information' as they learn, through trial and error, risk taking and their application of skills and understandings to new contexts, they are constantly reflecting on, reconstructing and reapplying their growing 'geographical' knowledge and understanding (O'Brien, 2003; Ba, 2009). Through this broad-based everyday reconstituting of evolving schemas children develop a conceptual base about their local world and the wider world and environment, providing a basis for action,

further reflection and reconceptualisation. This has been described from the days of early investigations into this area (e.g. Piaget, 1929; Piaget & Inhelder, 1956) and subsequently in terms of children's construction of their knowledge in, of and about the world and is the basis for their everyday spatial, environmental and place competence, that is, their *ethno-geographies*.

Studies of children's experience of their locality reveal ways in which they construct their knowledge of the environment and their sense of place. The older primary age children in Ba's (2009) study of their exploration of their local area in New York, U.S.A., identified how and what they learnt through experience from the *affordances* an area provides, such as which of the various commercial sites are child-friendly and will accommodate younger children 'hanging out' rather than as customers. Pike's (2008) studies in Dublin and Waterford, Ireland, noted that children's perspectives included ways in which they *appropriated* places, naming them for their own use, to be sites of activity. Similarly, Derr (2006) identified that the freedom to explore enables children to construct not only, for instance, 'dens' within their own locale but to recognise the special-ness of sites that matter to them. Children's awareness of the potential and of its corollary, risk, in an environment is not simply a matter of the state of the physical aspects of the environment but is rooted strongly in the human dimension, the ways in which shopkeepers, park staff and other adults and youth respect and relate to children, providing child-friendly and social contexts for them, and the ways in which they *subvert* these.

Children's active engagement out in their locality was exhibited in Freeman's (2010; Freeman & Tranter, 2011) study based in Dunedin, New Zealand. This linked with their *attachment* to their neighbourhood, which had a strong social-relationships focus. Children who had ready and direct access to the neighbourhood and wider area, as in Ba's (2009) study, developed their sense of place through personal *exploration* and *social interaction*, giving rise to sensing their experienced places as both physical and social entities, a finding similar to that of Cele's studies in England and Sweden (2006). Pike (2008) argues that from this experience in their everyday places younger children develop effective *spatial and place knowledge* of their everyday environments along with understanding of the processes which shape their places. O'Brien (2003) noted London-based younger children's environmental concerns and interest in *place improvement*, their clear sense of neighbourhood quality. Their capacity to 'reconstruct' less-pleasant parts of the environment, such as stair wells into 'bases', did not deter them from clearly expressing their desire that those responsible for the quality and cleanliness of the local area, including its buildings, had a responsibility to undertake this effectively and consistently. Similar views were expressed by children who participated in research with Al Kalaileh (2008) into their everyday environment in Amman, Jordan, where they argued that environmental improvements included not only collecting the litter and cleaning the streets but also improving the street environment through tree planting, reducing traffic congestion and noise and tackling crime levels, another source of risk.

These world-wide examples illustrate that through their movement about and exploration of their environments children develop not only familiarity with places and learn their way around them, but that they build an evident sense of the state of the environment, realise and make use of the opportunities that social responses afford, 'subvert' it for their own interests and ends, have a clear appreciation of the

risks inherent in the 'real world' and develop views about how adults should undertake their responsibilities to places and the people who live there. Younger children are able to propose ways in which places can be improved and sustained, and they do not exempt themselves from such involvement to make a difference (Alexander & Hargreaves, 2007). Children come across as informed, engaged and interested in both their own futures and those of others. They know about their places. This is knowledge and understanding which continues to evolve – as it does with adults – through daily engagement in their environments. It forms the heart of their ethno-geographies.

We contend that these are not only powerful aspects of children's lives, but that their personal geographies provide *powerful knowledge* which children use in their daily lives to make sense of their world as they encounter it, to reflect on it and to deepen their appreciation, understanding and the uses they can make of it. Children do not enter schooling without a geographical background nor without geographical skills, knowledge and understanding that are in and from their lived geographies. However, the notions that children use to understand and make use of their localities and their experiences in them, such as affordance, appropriation, subversion, exploration, social interaction, space and place knowledge and environmental improvement, are largely not the terms that the academic discipline of geography uses to construct its discourse. The perspective that younger children develop *powerful geographical knowledge* accords with the argument within the sociology of childhood that we can and must take a more positive sense of childhood and of children's experience and learning through their lived lives (Holloway & Valentine, 2000; Jenks, 2005), that children bring valid and valuable experience, understanding and knowledge into the classroom which should be engaged with and not treated as lacking or impaired and needing simply to be replaced or amended (Slater & Morgan, 2000).

A revised model of the knowledge-curriculum relationship

We noted earlier that Freire set out two initial levels or stages in developing everyday or ethno-knowledges. 'Moment one' introduced the idea of knowledge in the experience, and 'moment two' was explained as a reflection on that experience to know it a second time, epistemologically and as commonsense. We suggest that there could be further third and fourth levels or stages – a dialogue with the academic (a meta-reflection) that causes a third sense of knowing, but that in this dialogue the teacher also has a 're-knowing' which develops/extends the sense of knowing the subject. The fourth stage is, then, the dialogue between the teacher knower and the subject community, in which the dialogue between the two in turn changes the subject/discipline – i.e. that teacher practitioners are part of the community that develops the subject as it relates to the school curriculum.

In this model both academic and everyday knowledges are powerful. We contest *Powerful Knowledge* (capital letters), which privileges the academic, and suggest a view of knowledge that is powerful (lowercase) in which both academic and everyday knowledges are viewed as equally powerful, albeit for different reasons. These knowledges then come into dialogue with each other with the result that both are changed by the encounter in some way – new knowledge is created that has elements of both in it. We draw on Giroux's notion of *becoming* here – that as learners

children (and, indeed, adults) are becoming (Freire, 1998) and that teachers need to approach the job of teaching as learners, as always becoming. Indeed, this is the case with academic subjects, as discipline histories evidently testify (Martin, G. 2005; Holt-Jensen, 2009; Agnew & Livingstone, 2011), that is, they have an identity of their own, but this identity is not fixed, since subjects are dynamic and constantly changing, thus *becoming*.

Giroux discusses the idea of a border pedagogy in which teachers and students occupy a space where meaning is suspended, and where there is space to negotiate meaning in the classroom, as explored in the 'Enquiring Minds' project (Morgan & Williamson, 2009). In this project the curriculum

> had to be constructed through the dialogue between students and teachers. It was a border pedagogy in the sense that it existed at the margins of the formal school curriculum. It was a different space, where … students and teachers were involved in the co-construction of knowledge. (p.43)

Authority		held by both contexts		**Authority**
Powerful knowledge	->	Curriculum as articulation	<-	Powerful knowledge
[*The discipline of geography*]				[*The younger child with geographical experience*]
Academic perspectives of geography		where the pedagogic, dialogic inter-relationship lies		Everyday geographical perspectives (ethnogeography)
It is: rational conceptual systematic coherent structured				It is: rational conceptual systematic coherent structured

Figure 2: A revised model of the authority relationship of academic and everyday (geographical) knowledge.

What this co-construction of knowledge acknowledged is the authoritative voice of both the child and the teacher/subject – that both bring 'powerful knowledges' to the investigation and construction of knowledge and understanding. Using Hart's (2001) distinction between information, knowledge, understanding and wisdom, understanding is inclusive because, 'the other is no longer separate but becomes part of our world and ourselves in a profoundly intimate way' (Hart, 2001, 13). The essence of this argument is that children's everyday or ethno-knowledge and

understanding is no longer 'Othered' but becomes the co-core, with the subject, at the heart of the curriculum and pedagogy. We have represented this in Figure 2, which reworks Young's model, outlined in Figure 1, to show the concomitant authorities which both children's everyday experience and understandings and subject interpretations and knowledge provide reciprocally for each other. Here the curriculum is an articulation of the inter-relationship between the two '*powerful knowledges*' brought to bear by children and subjects and fostered by the pedagogical interactions between these two 'authorities'.

Considering two implications

There are various implications in the argument we have made. We will focus on aspects of just two. One is the applicability to other subjects in the primary curriculum. The other concerns the implications for teachers and primary schools. We set these out briefly to indicate the need for fuller consideration by specialist and curriculum developers.

We have illustrated our argument with geographical education. There has been a similar, older interest in this debate in mathematics education, exploring the notion of ethnomathematics. In the mathematical context arguments have been made challenging the false dichotomies between binaries encapsulated by the practical and the academic, action and reflection, subject and object, and concrete and abstract. Binaries are often used hierarchically to privilege one over the other, such as the objective over the subjective. In ethnomathematics the argument is not that one aspect is more powerful than the other but that both have equal roles in the dialogue (D'Ambrosio, 1985). A key element of the argument is that teachers must draw upon the context of their pupils to interrelate understandings of academic mathematics and ethnomathematics. Studies have been undertaken that explore ways to connect the situatedness of children's everyday mathematics with academic mathematics (Gerdes, 1997), which focus on the daily games, activities and commerce of children's and non-Western people's lives. This also implies understanding children's social and cultural backgrounds to be able to draw effectively on their ethnomathematics (D'Ambrosio, 1994). Mathematics is thus a second subject in which the notions that we have discussed have been developed. While there appears to be negligible work on this topic in other subjects, nonetheless, we consider this to be a fruitful avenue to explore.

Ofsted (2008, 2011) has identified concerns about the nature and depth of primary teachers' geography subject knowledge and understanding, which affects their confidence in teaching geography. Implicit in teachers' lack of subject knowledge is the limited residual school geography they recall and a minimal or lost awareness of their personal ethnogeography (Martin, 2008a, 2008b). For very many primary teachers this has never been addressed in their minimal initial teacher education programme or through continuing professional development (CPD), which has become increasingly less available (Ofsted, 2011). This has evident implications for younger children's learning. It identifies a need to address both the nature and length of geography units in initial teacher education programmes and the provision of CPD. One means of addressing this concern is to maintain the training of primary geography subject specialists. Such courses will need to engage novice teachers in

developing their own connection with their personal or everyday geographies, alongside understanding children's ethnogeographies, and to develop their understanding of the academic structure and vocabulary of the discipline of geography. The Geographical Association in the UK has used the government funded Action Plan for Geography (www.geographyteachingtoday.org.uk) to develop several initial such e-based CPD programmes (GA, 2010). This implies that novice teachers should undergo the same dialogue that they then might undertake with their pupils, between their ethnogeographies and academic geography in their own programmes, as indicated in Figure 2.

Conclusion

Arising from the arguments presented above, we propose that equal value is given to everyday or ethno-geography and to academic geography. Everyday geographies are rational, conceptual and structured, but *differently* so to academic geography. While ethnogeographies are grounded personally and socially, providing the conceptual base for daily interactions, living and reflection, academic geographies provide an alternative aggregated reflection and conceptualisation, the basis for creating and using subjects. Our case is one of social justice, in which difference is encountered not as an 'Other' to be replaced by one dominant, powerful discourse, but to be brought into dialogue as a democratic partner in the mutual interplay of learning in the process of evolution within and between the everyday knowledges of children and the disciplinary knowledges of subjects. This relationship recognises that what is taken from classroom interactions is not a replacement of one set of experiences and understandings (in the 'subjective' child) by another set of experiences and understandings (from the 'authoritative' teacher/subject) but is the intersection and interaction of the two authorities, which both foster the child's personal learning of the everyday and of the academic, and feeds into re-interpretations of the subject for the teacher and the discipline. Butt reinforces this point when he concludes in an analysis of the role of personal geographies in the geography classroom that

> 'only when the geography classroom becomes reorganised as a space where children are entitled to know will they be addressed "less as children and more as participants in a culture they share (Slater & Morgan, 2000, p.272)". (Butt, 2009, 21)

We have noted the antecedents for this argument lie in the case for ethnomathematics, and we consider that the argument here can be applied in other subject areas in relation to primary children's ethno-knowledges and their learning about subjects through the primary curriculum. Geography is a pertinent example of this argument because it is so much a part of children's lives from their earliest years, since without their engagement in knowing and understanding the physical and human everyday worlds, not only would they not undertake such apparently straightforward matters as wayfinding but they would not construct their sense of their environments as lifeworlds in order to make use of the affordances they offer. Geography is a fundamental and essentially powerful aspect of being human from the earliest years.

In the coming years there will continue to be debates about the nature of knowledge and its role in the curriculum. This paper is a contribution to that debate and one that

calls for a fundamental rethink of the role of and relationships between knowledge and the curriculum in the primary context. We have argued that children are to be viewed as contributors to our shared knowledge and understanding of the world rather than as recipients and 'beneficiaries' of 'hand-me-down' curricula which emerge from bodies of ideas designed for secondary schooling and then diluted until suitable for primary consumption. Our argument proposes a reversal of thinking which might go far beyond the present debate to challenge and change classroom dynamics and perhaps contribute to fuller and deeper engagement of children with both their ethno-knowledges and academic subjects.

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END NOTE

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